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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/805,214

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Tsuyoshi Nakamura

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07/27/2006

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EXAMINER

GREENHUT, CHARLES N

ART UNIT

PAPER NUMBER

3652

DATE MAILED: 07/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/805,214	Applicant(s) NAKAMURA ET AL.	
	Examiner Charles N. Greenhut	Art Unit 3652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 5/9/06 & 4/21/06.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

I. Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claim(s) 1-3, and 8-9 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over SELYUTIN (US 6,120,609 A) in view of POLLOCK (US 4,726,689 A).

1.1. With respect to claim 1, SELYUTIN discloses a casing (38), table (22), connecting portion (32), moving portion (Fig. 10-15), base (34), adjusting support (239) and seal (Col. 1 Li. 64-67). SELYUTIN fails to disclose a differential pumping seal. POLLOCK teaches a differential pumping seal is known in the art (Col 1. Li. 16 et seq.). It would have been obvious to one of ordinary skill in the art to modify SELYUTIN with the differential pumping seal of POLLOCK in order to provide low friction, low particulates, low noise, and high stiffness guidance to a substrate support shaft while maintaining a high differential pressure between the evacuated process chamber and the ambient environment which surrounds it.

1.2. With respect to claim 2, SELYUTIN additionally discloses the casing and base placed on a surface plate (230).

1.3. With respect to claim 3, SELYUTIN additionally discloses supporting the base at three points or more (Fig. 19).

1.4. With respect to claim 8, SELYUTIN additionally discloses a seal plate (110), O-ring (52) and bellows (48).

- 1.5. With respect to claim 9, SELYUTIN additionally discloses a drive unit (Col. 2 Li. 4).
2. Claim(s) 4, and 6-7 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over SELYUTIN in view of POLLOCK and further in view of KOBAYASHI (US 5,073,912 A).

2.1. With respect to claim 4, SELYUTIN teaches only one adjusting portion.

KOBAYASHI teaches a fine (3) and coarse (2) adjusting portion. It would have been obvious to one of ordinary skill in the art to modify SELYUTIN with the fine and coarse adjusting portions of KOBAYASHI in order to allow both efficient and accurate positional adjustments.

2.2. With respect to claim 6, SELYUTIN does not specify the type of drive source used.

Electric drives are well known in the art, for example, KOBAYASHI teaches an electric drive (603). It would have been obvious to one of ordinary skill in the art to modify SELYUTIN with the electric drive KOBAYASHI in order to actuate the adjusting mechanisms.

2.3. With respect to claim 7, SELYUTIN additionally discloses a suppress means (240).

3. Claim(s) 5 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over SELYUTIN in view of POLLOCK and further in view of MCDONALD (US 2,908,472 A)

3.1. With respect to claim 5, SELYUTIN does not specify the type of drive source used.

Hydraulic drives are well known in the art, for example, MCDONALD teaches a hydraulic drive source (Fig. 1). It would have been obvious to one of ordinary skill in the art to modify SELYUTIN with the hydraulic drive of MCDONALD in order to actuate the adjusting mechanisms.

II. Response to Applicant's Arguments

Applicant's arguments entered 4/21/06 & 5/9/06 have been fully considered.

1. Applicant argues that the term "surface plate" is sufficiently definite to comply with 35 USC 112 2nd paragraph. This argument is persuasive and the rejection under 35 USC 112 2nd paragraph is withdrawn and a "surface plate" is deemed to define a thing having a flat surface.
2. Applicant argues that claim 1, as amended, is not anticipated by SELYUTIN because the positioning device of claim 1 allows horizontal movement. This argument is not persuasive. The features upon which applicant relies (i.e., horizontal movement) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims.
3. Applicant argues that claim 1, as amended, is not anticipated by SELYUTIN because SELYUTIN fails to teach a moving portion. This argument is not persuasive. The "lift mechanism" of SELYUTIN which is comprised of various elements, can be considered a "moving portion" for purposes of claim 1, within the broadest reasonable interpretation of that term since it is clearly seen moving (cf. Fig. 10-15).
4. Applicant argues that claim 1, as amended, is not anticipated by SELYUTIN because SELYUTIN fails to teach an adjusting support. This argument is not persuasive. SELYUTIN teaches an "adjusting support" (239) within the broadest reasonable interpretation of that term. Applicant further argues that claim 1, as amended, is not anticipated by SELYUTIN because SELYUTIN fails to teach the adjusting support causing the relative displacement to hold the clearance between the base and casing constant. This argument is not persuasive. A recitation of the intended use of the claimed invention must result in a structural difference

between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In SELYUTIN, for example, if the lower portion of the casing (38) were distorted due to pressure differential, the adjusting support (239) could be employed to maintain the desired clearance between the base (34) and the casing (38). Since the adjusting support (239) is capable of performing this function, it meets the limitations of the claim. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims.

5. Applicant argues that claim 1, as amended, is not anticipated by SELYUTIN because SELYUTIN fails to teach a work drive. This argument is not persuasive. The features upon which applicant relies (i.e., a work drive) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. Assuming applicant is referring to the drive unit as claimed in claim 9, SELYUTIN discusses but does not show that the moving portion is connected to a drive unit (Col. 2 Li. 4).

III. Conclusion

1. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
2. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will

expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles N. Greenhut whose telephone number is (571) 272-1517. The examiner can normally be reached on 7:30am - 4:00pm EST.
4. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen D. Lillis can be reached on (571) 272-6928. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.
5. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CG


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